The Mecheleciv

Volume 25 May - 1967 No. 6

THE GEORGE WASHINGTON UNIVERSITY

MAY 1967

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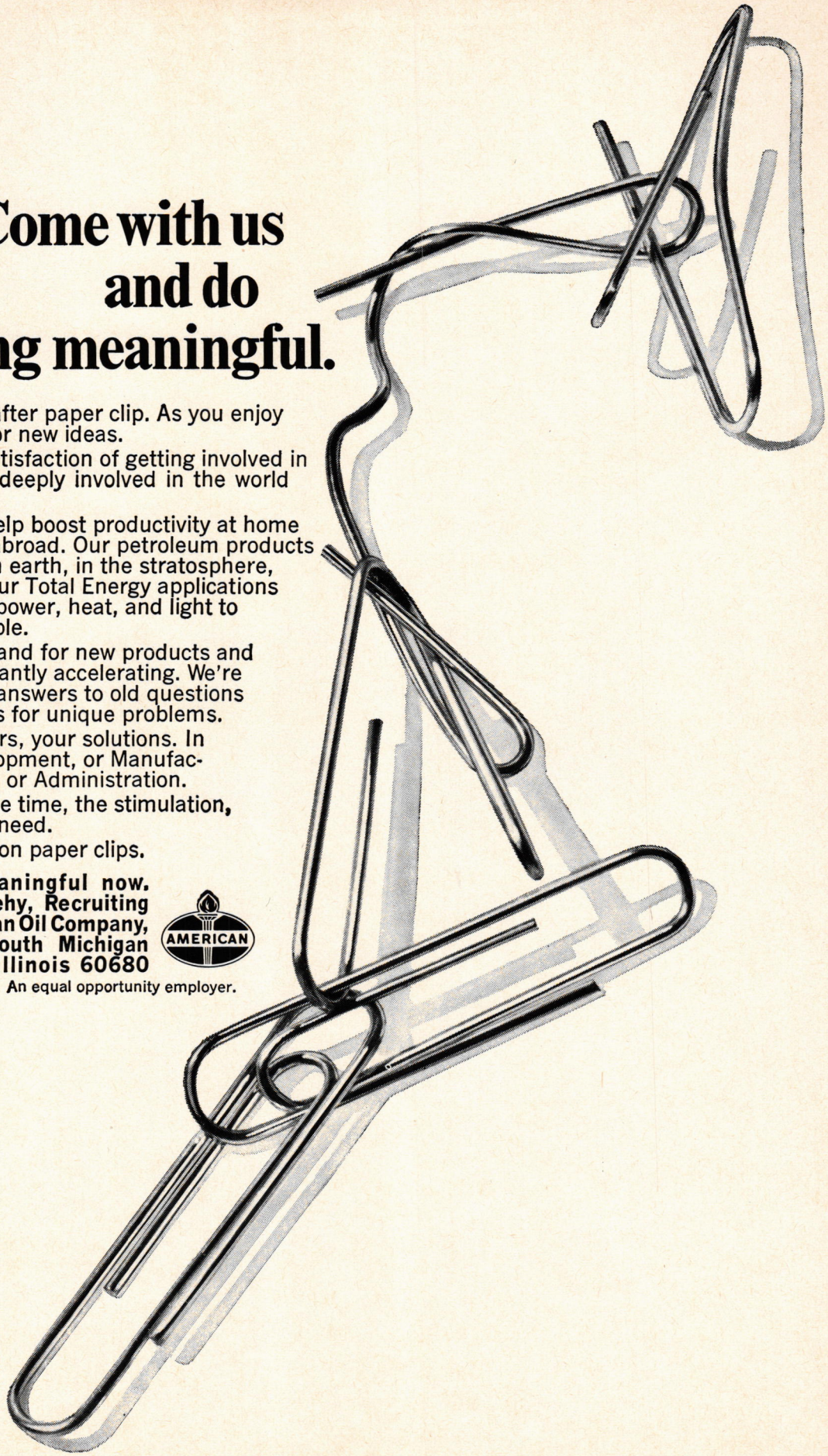

WARNING

MECHELECIV

Many engineering students have probably never wondered where their engineering magazine comes from. Mechelediv is a student publication that needs the support of the students if it is to exist. In recent months the support from the student body has fallen to almost zero.

To be a good publication, the staff must be willing to put in a few hours on each issue and there must be interesting articles submitted by those not on the staff. Without more support from the students Mechelediv cannot continue to publish.

If you are interested in helping, please let us know. You may write or call: Stacy Deming
1564 33rd St. N.W.
Wash, D.C. 20007
FEB-1985

Think it over, have a good summer, and I hope to hear from you in the near future.

Stacy Deming

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SUDDENLY, IT'S UP TO YOU.

Where has the time gone? Suddenly (it seems) you're about to be a graduate engineer... faced with a career choice that is yours alone to make.

The transition from cap and gown to the professional world can be a rewarding experience—*providing* your decision is based on the prospects of a solid, dynamic future offering maximum *growth potential.*

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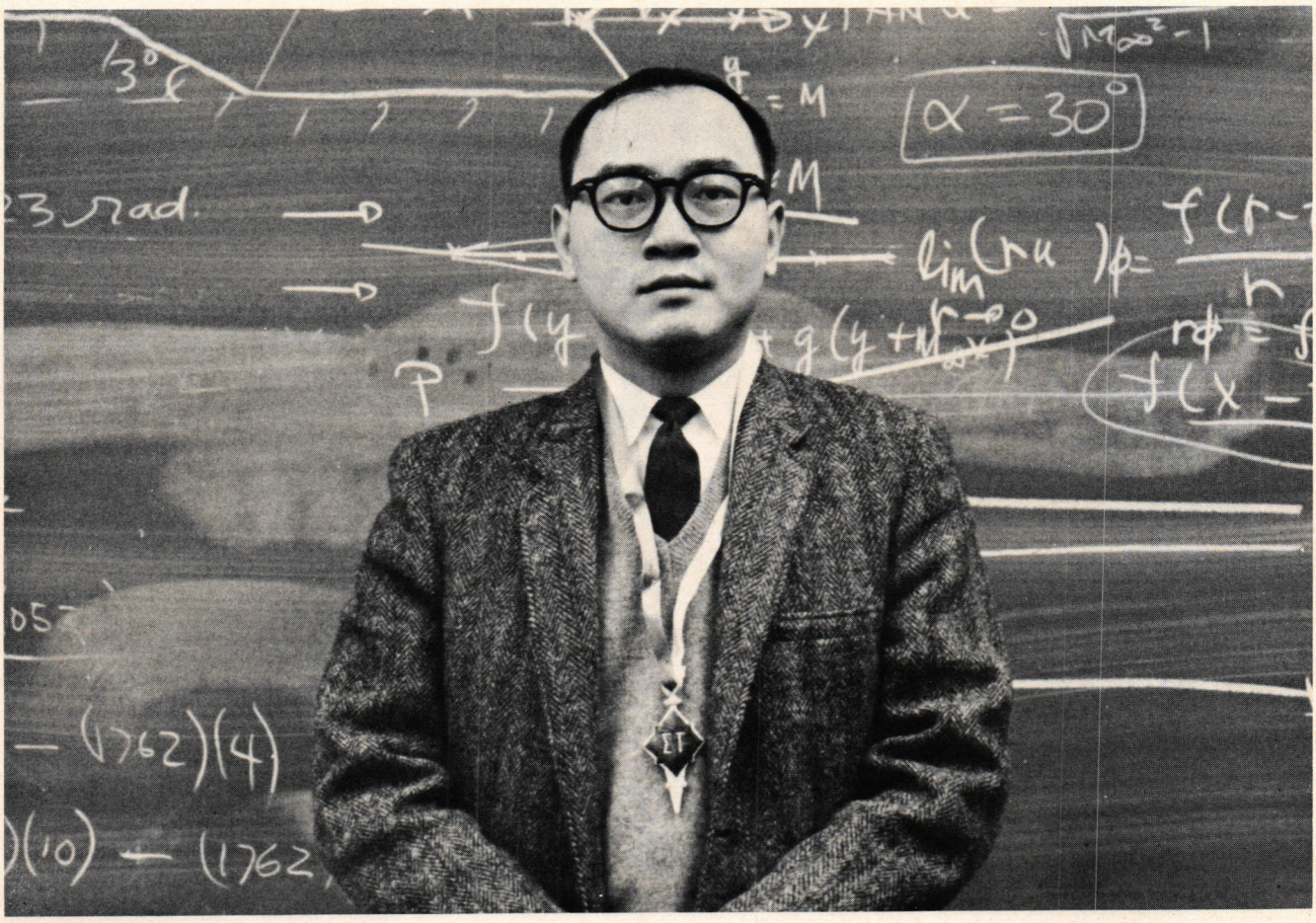
SIGMA TAU INITIATES DR. LEA AS CHAPTER ADVISER



On Tuesday April 25, 1967, Xi Chapter of Sigma Tau Fraternity initiated a new alumni member and new chapter advisor, Dr. George K. Lea of the SEAS Engineering Mechanics Department. Sigma Tau, a National Engineering Honorary Fraternity, stresses scholarship, practicality, and sociability as its three prerequisites to membership. New candidates are selected twice a year under the auspices of the active Sigma Tau Brotherhood. Dr. Lea was initiated in a special initiation two weeks prior to the regular initiation of the new pledge class, which was held on Saturday, May 6, 1967.

Dr. Lea, an Assistant Professor is an alumnus of SEAS, receiving his BSME here in 1960. He continued his education at The Virginia Polytechnic Institute, obtaining his Ph.D. in Engineering Mechanics there in 1966. While working for his Ph.D., Dr. Lea was an instructor at V.P.I. from 1963 to 1965. Originally from Shanghai, China, Dr. Lea spends his summers working at The David Taylor Model Basin. He is a member of Phi Kappa Phi, Sigma Xi, AIAA, and now Sigma Tau. His technical interests center around the radiation gas dynamics aspect of fluid mechanics and he enjoys photography and music as hobbies. Sigma Tau is indeed proud to welcome Dr. Lea to brotherhood and we look forward to a long and fruitful association with Dr. Lea in his all important role as new chapter advisor.

Research opportunities in highway engineering

The Asphalt Institute Suggests Projects in 5 Vital Areas

Phenomenal advances in roadbuilding techniques during the past decade have made it clear that continued highway research is a must.

Here are five important areas of highway design and construction that America's roadbuilders need to know more about:

1. Rational Pavement Thickness Design and Materials Evaluation.

Research is required in areas of asphalt rheology, behavior mechanisms of individual and combined layers of the pavement structure, stage construction and pavement strengthening by Asphalt overlays.

Traffic evaluation, essential for thickness design, requires improved procedures for predicting future amounts and loads.

2. Materials Specifications and Construction Quality-Control.

Needed are more scientific methods of writing specifications, particularly rejection and acceptance criteria. Also needed are speedier methods for quality-control tests at construction sites.

3. Drainage of Pavement Structures.

More should be known about need for subsurface drainage of full-depth Asphalt pavements which rest directly on the subgrade.

4. Compaction of Pavements, Conventional Lifts and Thicker Lifts.

The recent use of much thicker lifts in asphalt pavement construction suggests the need for new studies to develop and refine techniques of measuring compaction.

5. Conservation and Beneficiation of Aggregates.

More study is needed on beneficiation of lower-quality base-course aggregates by mixing them with Asphalt.

For background information on Asphalt construction and technology, send in the coupon.

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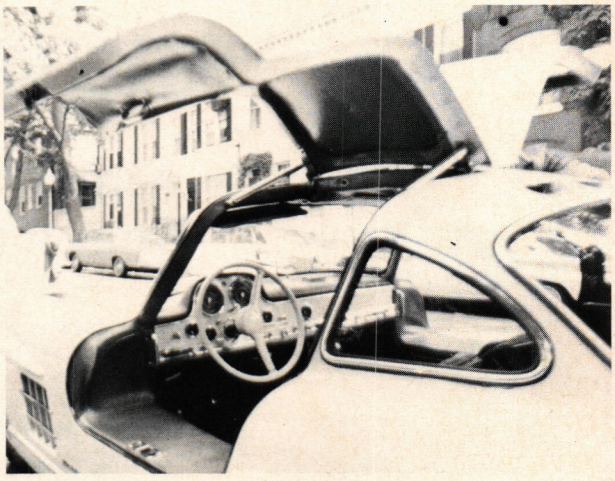
Dear Mr. Benz

MERCEDES–BENZ

The car pictured was the 48th car made in the series of less than 1000. It is a 1955 300 SL Gull wing. It has a 287 cu. in. engine which produces 240 HP. The car is capable of 160 MPH and is one of the engineering masterpieces of all time.



Dear Mr. Benz,

Last Sunday I was out for an afternoon walk and just happened to see one of the most beautiful cars I have ever seen. I didn't know what marque or model it was, but I could tell it had real class right off.

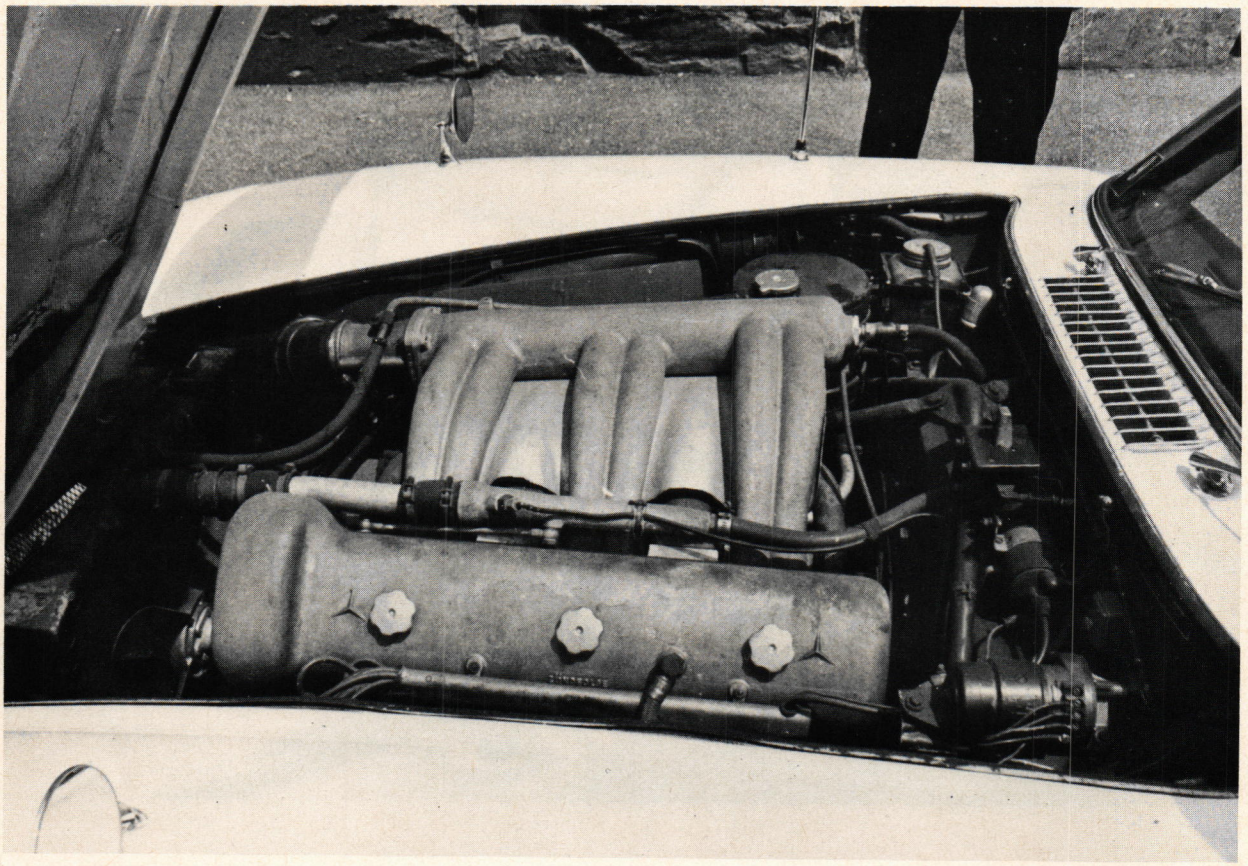
Well, it was just parked and I was just a little curious so I went over to have a look. Those seats sure looked comfortable, I could see right in since the windows were out. That leather looks so soft and shiny. The next thing I noticed was those funny little door openers you have on the sides. I really didn't know what they were at first, but when I pushed and pulled, the whole side of the car started to come up. Those springs you have in the roof just seem to let the door float up real gentle. Those seats sure are low. I wanted to sit for just a minute so I tried one out. (It took me more than a minute to get in, there must be some trick.) Those seats really hold you in, but I guess that's what you want when you're doing 160 MPH at Monza.

Well, getting in wore me out enough so I just sat and looked at all the gauges and switches.

You don't like to use idiot lights do you? I guess you can guess what happened next, I turned the key just a little, but that was enough. That en-

—Continued on page 10

MERCEDES BENZ–*Continued from page 9*



gine sure sounds good at first; I thought all it had was a low rumble, but later I found out different.

That clutch sure is a hard one, but it works great, doesn't slip at all. I don't really know what happened next, but I found myself on the beltway at 150 MPH with a horde of cops behind me. I probably could have out-run them since I had just had the 35 gallon tank filled but I'm not that type.

This brings me to my reason for writing this letter. I can't return the car because my trial doesn't come up for two weeks, but if you would like the car you can pick it up at the jail in Rockville. Maybe I could get out for an hour or two when you come and we could sit in it for a while.

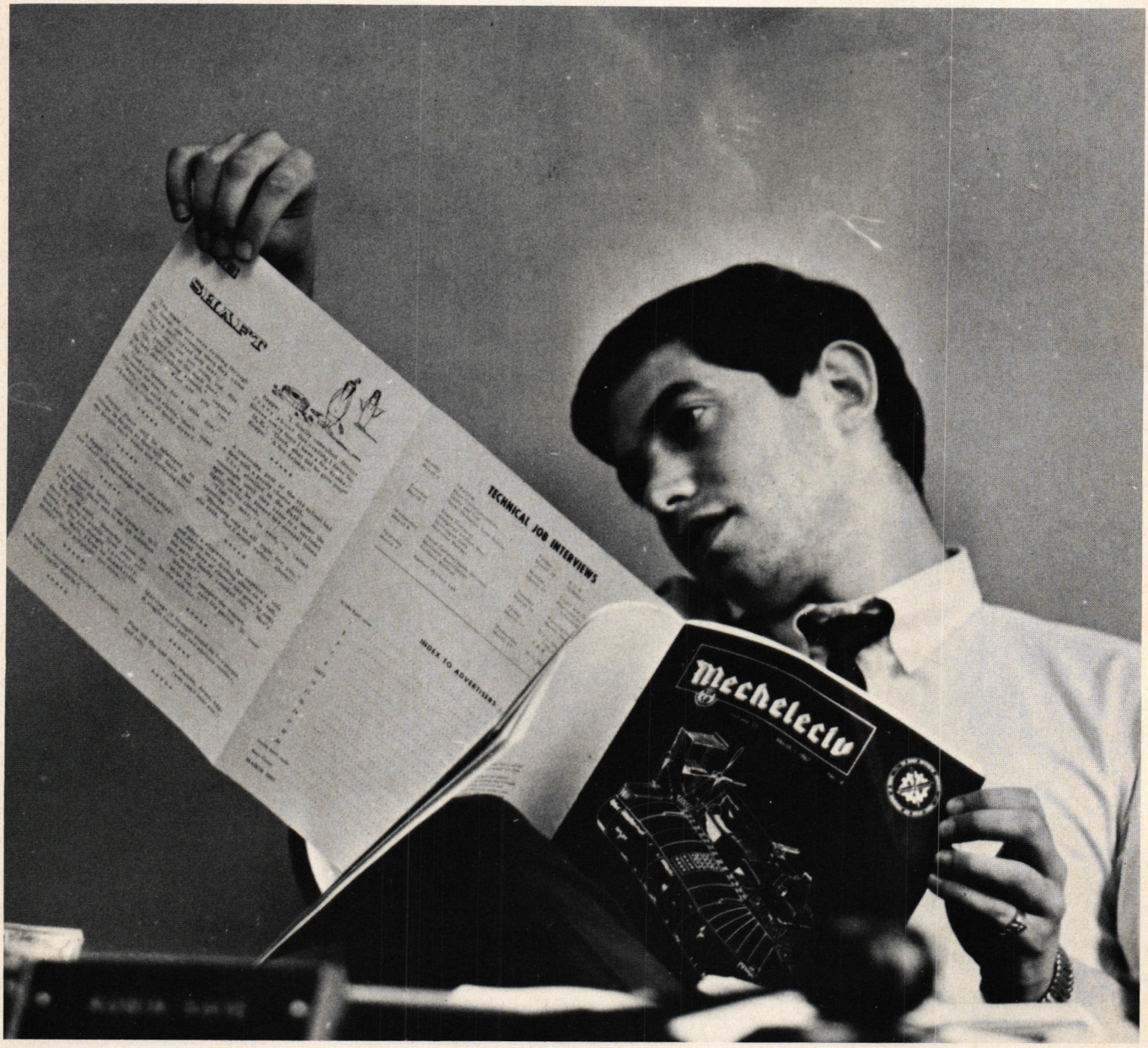
–H. Ford

MECH MISS... BETH MANN

The last Mech Miss for this semester is Beth Mann, who hails from Gordon City, New York. Beth is a freshman at George Washington and is hoping to major in science.

At GW Beth is a member of Kappa Kappa GAMMA Sorority and enjoys sports and art. Her summers are spent working at a pool in New York.

MECHELECIV
IS READ EVERYWHERE

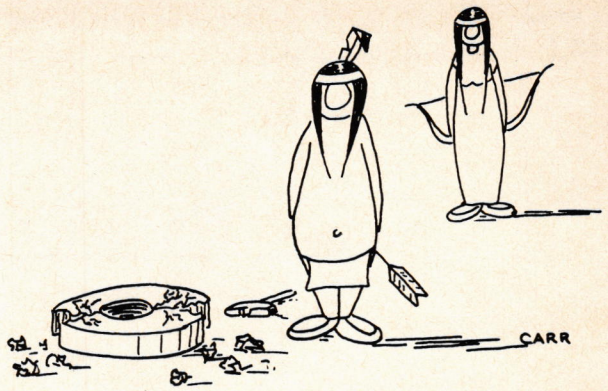


MECHELECIV NEEDS . . .

ARTICLES OF UNPARALLED QUALITY
EDITORIAL ASSISTANTS OF UNDAUNTED SPIRIT
CAMPUS NEWS OF UN-LATE NATURE
ART WORK OF UNKNOWNS
AND MUCH MORE UNNAMED HELP.

CONTACT ANY ONE ON THE STAFF OR LEAVE A NOTE IN THE D.H. HOUSE MAIL BOX CARE OF THE CHIEF.

THE SHAFT



The new doctor was the only one available in the mining town when Engineer Kelly's wife was taken ill. Called to the Kelly home, he went upstairs to the sick room but came down in a few minutes to inquire, "Have you a corkscrew handy?" Given the tool, he disappeared up the stairs for the second time.

Several minutes later the doctor was back. "Got a screw driver?" he asked the anxious Kelly. Instrument in hand, he went upstairs again.

Almost immediately he was downstairs again. "A chisel and mallet, quickly," he demanded. The distraught engineer could stand it no longer. "For the love of Heaven, he begged, "what's the matter with my wife?"

"Don't know yet," was the reply. "Can't get my medicine bag open."

* * *

He lived on the border between Russia and Poland and he worried about it for years. "I'm a man without a country," he said. "I don't know where I live." So eventually, he got a state surveyor to swing around his way and make a careful survey. "You live," decided the surveyor, "in Poland."

The Pole hurled his hat in the air with a cheer "Thank God!" he cried. "No more of those terrible Russian winters!"

* * *

A clergyman at a dinner had listened to a talkative young man who had much to say on Darwin and his "Origin of the Species."

"I can't see," he argued, "what difference it would make to me if my grandfather was an ape."

"No," commented the clergyman, "I can't see that it would. But it must have made a great difference to your grandmother."

* * *

Then there is the nurse who is so conceited that when she takes her patient's pulse, she subtracts ten beats for her personality.

* * *

Having taken a few too many drinks at a hotel dance, a pretty young thing ran out of doors, fainted, and fell over a trash barrel. A shovel runner saw her, picked her up and carried her to his room. The next morning he wired his partner out of the state: "CLOSE OFFICE, SELL EVERYTHING, COME TO TEXAS. THEY THROW AWAY BETTER STUFF HERE THAN YOU CAN BUY IN OTHER STATES."

* * *

A fool and his money are invited places.

* * *

"How did your brother die?"
"He fell through some scaffolding."
"What was he doing up there?"
"Being hanged."

* * *

Tim: "What was the cause of the collision at the corner today?"

Jim: "Two motorists after the same pedestrian."

* * *

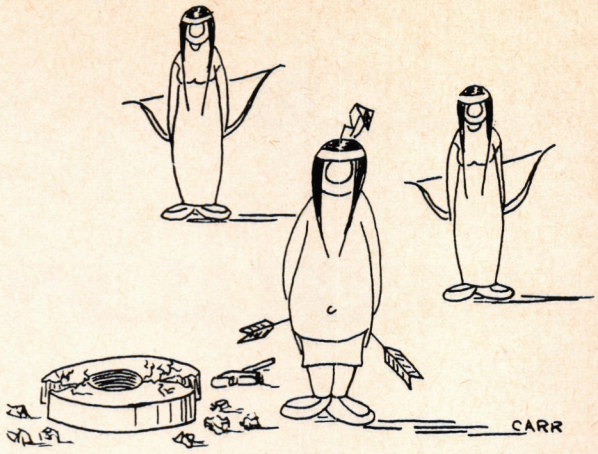
Doctor: "Why do you have BF9287 tattooed on your back?"

Patient: "That's not tattooed. That's where my wife ran into me when I was opening the garage doors."

* * *

A certain man was traveling overnight on a train. As he was preparing to retire for the evening, he noticed

SHAFTED AGAIN



that the berth beneath his was occupied by a young lady who was trying vainly to attract his attention. The man, somewhat annoyed, ignored her, got into his own berth, and was just about asleep when a voice was heard from below, "I'm so cold. Can I borrow an extra blanket or something to keep warm." The man thought a minute and then responded, "Why don't we pretend we are married tonight?" With a slight giggle she replied, "That sounds like fun." "Good," the man quipped. "Go get your own damn blanket!"

* * *

A tourist seeking an ideal southern town stopped in Jackson and asked an old timer if the place was healthy.

"Healthy?" the old man roared.

"Why this is the gol'darn healthiest place you ever did see. Shucks, nobody ever dies in these parts."

"That's strange," remarked the tourist. "On my way into town I passed a funeral procession."

"Oh that," the old timer grunted. "That was only the undertaker. The darn fool starved to death."

* * *

The man was applying for relief, and the girl at the desk was filling out the questionnaire.

"Do you owe any back house rent?" she inquired.

"Ma'm," he replied with dignity, "we've got modern plumbing!"

Mrs. Jones was sitting in the breakfast nook shelling peas when she heard a knock at the door. Thinking it was her son, she called "Here I am darling."

Silence . . . Then a deep voice answered, "This is not the regular milkman, ma'am."

* * *

House Mother: "Are you entertaining a man in your room?"

Flora: "Just a minute, I'll ask him."

* * *

"Did anyone ever tell you that you have beautiful eyes?"

"Yes, but not when they were looking where you are."

* * *

A rather ingenious engineer calls his girl "Definite integral" because he knows her limits.

* * *

Then there was the one-fingered pick-pocket who could only steal lifesavers.

* * *

A robber was holding up a Pullman car. "Out with the cash or I'll kill all the men and molest the women!"

An elderly man said indignantly: "You shall not touch the ladies."

Just then an old maid in an upper berth yelled out: "You leave him alone–HE'S robbing this train."

* * *

Six engineers came weaving out of Casey's and started to crowd themselves into the Volkswagen for the ride home. One of them took charge.

"Herbie," he said, "You drive, you're too drunk to sing."

* * *

Three ways to break up a dinner conversation: 1. Ask the lady on your right if she is married. If she says yes, ask her if she has any children. If she says no, ask her how she does it. 2. Ask the lady on your left if she is married. If she says no, ask her if she has any children. 3. Lean across the table and ask the the lady facing you if she has any children. If she says yes, ask her if she is married.

* * *

A gullible man is one who thinks that his daughter has got religion when she comes home with a Gideon Bible in her suitcase.

* * *

A young lady from Boston got a little tired of everyone asking her if she was a descendant of the Mayflower settlers. She put an end to the question when she announced, "To tell the truth, I'm descended from a long line my mother once heard."

The Air Force doesn't want to waste your Bachelor of Science Degree any more than you do.

B. Sc. Those letters have an impressive sound.

But they won't be so impressive if you get shunted off into some obscure corner of industry after you leave college. A forgotten man.

You want activity. You want to get in there and show your stuff.

All right. How do you propose to do it?

If you join the United States Air Force you'll become an expert fast. The Air Force is like that. They hand you a lot of responsibility fast. Through Officer Training School you get a chance to specialize where you want... in the forefront of modern science and technology.

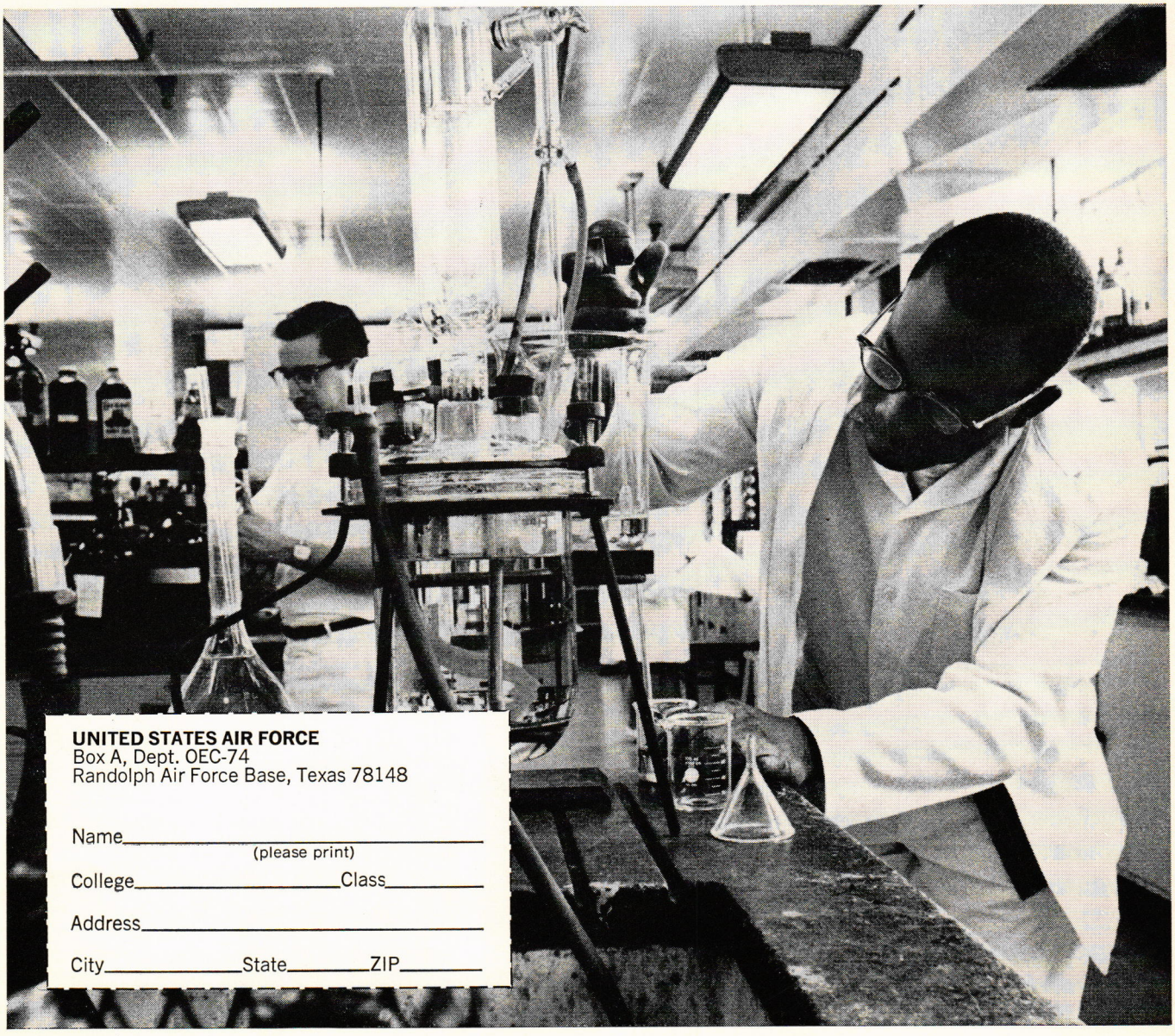
Suppose, for example, you wanted to become a pilot and serve as aircraft commander on airplane crews. You'd plan missions and insure that the aircraft is pre-flighted, inspected, loaded and equipped for the assigned mission. You'll be trained to fly exciting aircraft.

Just examples. There are so many more.

Wouldn't it be pretty nice to enjoy officers' pay and privileges? And serve your country, as well? Also, you get retirement benefits, 30 days' paid vacation, medical and dental care.

B. Sc. Very impressive letters.

Now, *do* something with them.



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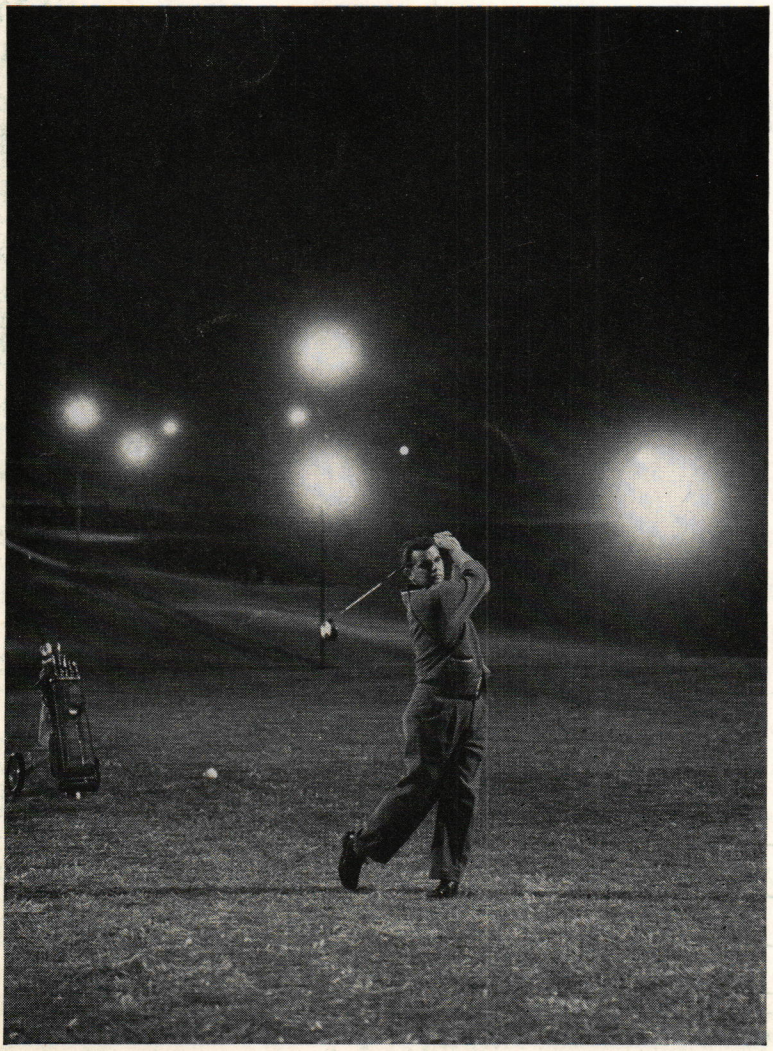
like longer days



Turning night into day with outdoor lighting is one of the many challenges you may face in your technical career at General Electric.

For example, inquisitive minds in research and advanced design at General Electric are evolving many concepts to make our recreation areas available day and night. Design engineers are developing concepts into specifications, while manufacturing engineers are developing the techniques and processes that translate designs into outdoor lighting systems.

In addition, technical marketing specialists are working with electric utilities and city planners, applying night-lighting to athletic stadiums, city parks, or outdoor pavilions.

You can help develop new products and concepts, new facilities, processes and manufacturing systems, or new applications and markets in your technical career with General Electric. For more information write: D. E. Irwin, Section 699-21, Schenectady, New York 12305.

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